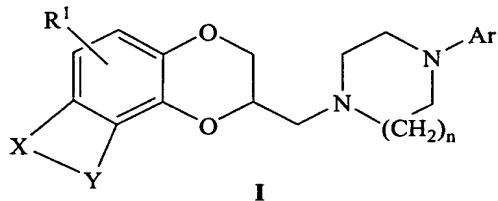


This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims

1. (currently amended) A compound of formula I:



wherein

R¹ is hydroxy, halo, cyano, carboxamido, carboalkoxy of 2 to 6 carbon atoms, trifluoromethyl, alkyl of 1 to 6 carbon atoms, alkanoyloxy of 2 to 6 carbon atoms, amino, mono- or di-alkylamino in which each alkyl group has 1 to 6 carbon atoms, alkanamido of 2 to 6 carbon atoms, or alkanesulfonamido of 1 to 6 carbon atoms;

the group X—Y is -N=C(R²)-C(R³)=N-, -N=C(R²)-C(R⁴)=CH-, -N=C(R²)-N=CH-, -N=C(R²)-O-, or -NH-C(R⁵)=CH-;

R² and R³ are, independently, hydrogen, halo, amino, mono- or di-alkylamino in which each alkyl group has 1 to 6 carbon atoms or alkyl of 1 to 6 carbon atoms;

R⁴ is hydrogen or alkyl of 1 to 6 carbon atoms;

R⁵ is hydrogen, halo, trifluoromethyl, pentafluoroethyl or alkyl of 1 to 6 carbon atoms;

Ar is phenyl, naphthyl, indolyl, indazolyl, thienyl, pyridinyl, pyrimidinyl, quinolinyl, benzofuranyl, ~~dihydrobenzodioxinyl~~, benzothienyl, benzoisothiazolyl, or benzisoxazolyl, each optionally substituted with one to three substituents independently selected from hydroxy, halo, cyano, carboxamido, carboalkoxy of 2 to 6 carbon atoms, trifluoromethyl, alkyl of 1 to 6 carbon atoms, alkanoyloxy of 2 to 6 carbon atoms, amino, mono- or di-alkylamino in which each alkyl group has 1 to 6 carbon atoms, alkanamido of 2 to 6 carbon atoms, or alkanesulfonamido of 1 to 6 carbon atoms; and

n is 1 or 2;

2. *(original)* A compound according to claim 1, wherein R¹ is hydrogen, halo, cyano, trifluoromethyl, alkyl of 1 to 6 carbon atoms or alkoxy of 1 to 6 carbon atoms.
3. *(original)* A compound according to claim 1, wherein R¹ is hydrogen, halo or alkoxy of 1 to 6 carbon atoms.
4. *(original)* A compound according to claim 1, wherein R¹ is hydrogen.
5. *(original)* A compound according to claim 1, wherein Ar is phenyl, quinolinyl, benzofuranyl, benzothienyl, or indolyl, each optionally substituted.
6. *(original)* A compound according to claim 1, wherein X-Y is -N=C(R²)-C(R⁴)=CH- and R⁴ is hydrogen or alkyl of 1 to 3 carbon atoms.
7. *(original)* A compound according to claim 1, wherein R² and R³ when present are independently selected from hydrogen, amino or alkyl of 1 to 6 carbon atoms.
8. *(original)* A compound according to claim 1, wherein R² and R³ when present are independently hydrogen or alkyl of 1 to 3 carbon atoms.
9. *(original)* A compound according to claim 1, wherein R⁵ is hydrogen, trifluoromethyl, pentafluoroethyl or alkyl of 1 to 6 carbon atoms.
10. *(original)* A compound according to claim 1, wherein R⁵ is hydrogen, trifluoromethyl or alkyl of 1 to 3 carbon atoms.
11. *(original)* A compound according to claim 1, wherein said compound is (2S)-2-{{4-(3-chlorophenyl)piperazin-1-yl)methyl}-8-methyl-2,3-dihydro[1,4]dioxino[2,3-f]quinoline or a pharmaceutically acceptable salt thereof.

12. (*original*) A compound according to claim 1, wherein said compound is (2S)-2-{{[4-(4-chlorophenyl)piperazin-1-yl]methyl}-8-methyl-2,3-dihydro[1,4]dioxino[2,3-f]quinoline or a pharmaceutically acceptable salt thereof.

13. (*previously amended*) A compound according to claim 1, wherein said compound is (2S)-2-{{[4-(3,4-dichlorophenyl)piperazin-1-yl]methyl}-8-methyl-2,3-dihydro[1,4]dioxine [2,3-f]quinoline or a pharmaceutically acceptable salt thereof.

14. (*original*) A compound according to claim 1, wherein said compound is (2S)-2-{{[4-(2-methoxyphenyl)piperazin-1-yl]methyl}-8-methyl-2,3-dihydro[1,4]dioxino[2,3-f]quinoline or a pharmaceutically acceptable salt thereof.

15. (*original*) A compound according to claim 1, wherein said compound is (2S)-2-{{[4-(3-methoxyphenyl)piperazin-1-yl]methyl}-8-methyl-2,3-dihydro[1,4]dioxino[2,3-f]quinoline or a pharmaceutically acceptable salt thereof.

16. (*original*) A compound according to claim 1, wherein said compound is (2S)-2-{{[4-(4-methoxyphenyl)piperazin-1-yl]methyl}-8-methyl-2,3-dihydro[1,4]dioxino[2,3-f]quinoline or a pharmaceutically acceptable salt thereof.

17. (*currently amended*) A compound ~~according to claim 1~~, wherein said compound is (2S)-2-{{[4-(dihydrobenzo[1,4]dioxin-5-yl)piperazin-1-yl]methyl}-8-methyl-2,3-dihydro[1,4] dioxino[2,3-f]quinoline or a pharmaceutically acceptable salt thereof.

18. (*previously amended*) A compound according to claim 1, wherein said compound is (2S)-8-methyl-2-[4-(3-trifluoromethyl-phenyl)piperazin-1-ylmethyl]-2,3-dihydro[1,4]dioxino[2,3-f]quinoline or a pharmaceutically acceptable salt thereof.

19. (*previously amended*) A compound according to claim 1, wherein said compound is (2S)-8-methyl-2-[4-(3-fluorophenyl)piperazin-1-ylmethyl]-2,3-dihydro[1,4]dioxino[2,3-f]quinoline or a pharmaceutically acceptable salt thereof.

20. (*original*) A compound according to claim 1, wherein said compound is (2S)-2-{[4-(2,3-dimethylphenyl)piperazin-1-yl]methyl}-8-methyl-2,3-dihydro[1,4]dioxino[2,3-f]quinoline or a pharmaceutically acceptable salt thereof.

21. (*original*) A compound according to claim 1, wherein said compound is (2S)-2-{[4-(3,4-dimethylphenyl)piperazin-1-yl]methyl}-8-methyl-2,3-dihydro[1,4]dioxino[2,3-f]quinoline or a pharmaceutically acceptable salt thereof.

22. (*original*) A compound according to claim 1, wherein said compound is (2S)-8-methyl-2-[(4-quinolin-2-ylpiperazin-1-yl)methyl]-2,3-dihydro[1,4]dioxino[2,3-f]quinoline or a pharmaceutically acceptable salt thereof.

23. (*original*) A compound according to claim 1, wherein said compound is ((2S)-8-methyl-2-{4-(6-nitroquinolin-2-yl)piperazin-1-yl]methyl)-2,3-dihydro[1,4]dioxino[2,3-f]quinoline or a pharmaceutically acceptable salt thereof.

24. (*original*) A compound according to claim 1, wherein said compound is (2S)-8-methyl-2-{4-(6-chloroquinolin-2-yl)piperazin-1-yl]methyl)-2,3-dihydro[1,4]dioxino[2,3-f]quinoline or a pharmaceutically acceptable salt thereof.

25. (*original*) A compound according to claim 1, wherein said compound is 2-(4-{[(2S)-8-methyl-2,3-dihydro[1,4]dioxino[2,3-f]quinolin-2-yl]methyl}piperazin-1-yl)quinoline-6-carbonitrile or a pharmaceutically acceptable salt thereof.

26. (*original*) A compound according to claim 1, wherein said compound is (2S)-2-{[4-(1-benzofuran-3-yl)-1-piperazinyl]methyl}-8-methyl-2,3-dihydro[1,4]dioxino[2,3-f]quinoline or a pharmaceutically acceptable salt thereof.

27. (*original*) A compound according to claim 1, wherein said compound is (2S)-2-{[4-(5-fluoro-1-benzofuran-3-yl)-1-piperazinyl]methyl}-8-methyl-2,3-dihydro[1,4]dioxino[2,3-f]quinoline or a pharmaceutically acceptable salt thereof.

28. (*original*) A compound according to claim 1, wherein said compound is ((2S)-2-{[4-(7-methoxy-1-benzofuran-3-yl)-1-piperazinyl]methyl}-8-methyl-2,3-dihydro[1,4]dioxino[2,3-f]quinoline or a pharmaceutically acceptable salt thereof.

29. (*original*) A compound according to claim 1, wherein said compound is (2S)-8-methyl-2-{[(2S)-2-methyl-4-quinolin-2-yl]piperazin-1-yl]methyl}-2,3-dihydro[1,4]dioxino[2,3-f]quinoline or a pharmaceutically acceptable salt thereof.

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30. (*original*) A compound according to claim 1, wherein said compound is 2-((3R)-3-methyl-4-{[(2S))-8-methyl-2,3-dihydro[1,4]dioxino[2,3-f]quinolin-2-yl]methyl}piperazin-1-yl)quinoline-6-carbonitrile or a pharmaceutically acceptable salt thereof.

31. (*original*) A compound according to claim 1, wherein said compound is (2S)-8-methyl-2-{[(2R)-2-methyl-4-quinolin-2-yl]piperazin-1-yl]methyl}-2,3-dihydro[1,4]dioxino[2,3-f]quinoline or a pharmaceutically acceptable salt thereof.

32. (*original*) A compound according to claim 1, wherein said compound is (2S)-8-methyl-2-{[4-(2-naphthyl)piperazin-1-yl]methyl}-2,3-dihydro[1,4]dioxino[2,3-f]quinoline or a pharmaceutically acceptable salt thereof.

33. (*original*) A compound according to claim 1, wherein said compound is (2S)-2-[4-8-methyl-2,3-dihydro-[1,4]dioxino[2,3-f]quinolin-2-yl]-piperazin-1-yl]-quinoline-6-carboxylic acid amide or a pharmaceutically acceptable salt thereof.

34. (*original*) A compound according to claim 1, wherein said compound is (2S)-2-[4-(2,3-Dihydro-[1,4]dioxino[2,3-f]quinolin-2-ylmethyl)-piperazin-1-yl]-quinoline-6-carbonitrile or a pharmaceutically acceptable salt thereof.

35. (*original*) A compound according to claim 1, wherein said compound is (2S)-2-[4-(8-Ethyl-2,3-dihydro-[1,4]dioxino[2,3-f]quinolin-2-ylmethyl)-piperazin-1-yl]-quinoline-6-carbonitrile or a pharmaceutically acceptable salt thereof.

36. (*original*) A compound according to claim 1, wherein said compound is (2S)-2-[4-(2-Methyl-7,8-dihydro-1,6,9-trioxa-3-aza-cyclopenta[*a*]naphthalen-8-ylmethyl)-piperazin-1-yl]-quinoline-6-carbonitrile or a pharmaceutically acceptable salt thereof.

37. (*original*) A compound according to claim 1, wherein said compound is (2S)-2-{[4-(6-Bromoquinolin-2-yl)piperazin-1-yl]methyl}-8-methyl-2,3-dihydro[1,4]dioxino[2,3-f]quinoline or a pharmaceutically acceptable salt thereof.

38. (*original*) A compound according to claim 1, wherein said compound is (2S)-2-{[4-(6-Bromoquinolin-2-yl)piperazin-1-yl]methyl}-8-methyl-2,3-dihydro[1,4]dioxino[2,3-f]quinoline or a pharmaceutically acceptable salt thereof.

39. (*original*) A compound according to claim 1, wherein said compound is (2S)-2-{[4-(6-methoxyquinolin-2-yl)piperazin-1-yl]methyl}-8-methyl-2,3-dihydro[1,4]dioxino[2,3-f]quinoline or a pharmaceutically acceptable salt thereof.

40. (*original*) A compound according to claim 1, wherein said compound is (2S)-2-{[4-(6-Trifluoromethoxyquinolin-2-yl)piperazin-1-yl]methyl}-8-methyl-2,3-dihydro[1,4]dioxino[2,3-f]quinoline or a pharmaceutically acceptable salt thereof.

41. (*original*) A compound according to claim 1, wherein said compound is 2-[4-(6-Fluoro-quinolin-2-yl)-piperazin-1-ylmethyl]-8-methyl-2,3-dihydro-[1,4]dioxino[2,3-f]quinoline or a pharmaceutically acceptable salt thereof.

42. (*original*) A compound according to claim 1, wherein said compound is (2S)-2-{[4-(6-methoxyquinolin-2-yl)-1,4-diazepan-1-yl]methyl]-8-methyl-2,3-dihydro[1,4]dioxino[2,3-f]quinoline or a pharmaceutically acceptable salt thereof.

43. (*original*) A compound according to claim 1, wherein said compound is 2-(4-{[(2S)-8-Methyl-2,3-dihydro[1,4]dioxino[2,3-f]quinolin-2-yl]methyl}-1,4-diazepan-1-yl)quinoline-6-carbonitrile or a pharmaceutically acceptable salt thereof.

44. (*original*) A compound according to claim 1, wherein said compound is (2S)-2-{[4-(6-Trifluoromethoxy-quinolin-2-yl)-1,4-diazepan-1-yl]methyl]-8-methyl-2,3-dihydro[1,4]dioxino[2,3-f]quinoline or a pharmaceutically acceptable salt thereof.

45. (*original*) A compound according to claim 1, wherein said compound is 2-[4-(6-Fluoro-quinolin-2-yl)-[1,4]diazepan-1-ylmethyl]-8-methyl-2,3-dihydro-[1,4]dioxino[2,3-f]quinoline or a pharmaceutically acceptable salt thereof.

46. (*original*) A compound according to claim 1, wherein said compound is (2S)-2-{[4-(6-Bromo-quinolin-2-yl)-1,4-diazepan-1-yl]methyl]-8-methyl-2,3-dihydro[1,4]dioxino[2,3-f]quinoline or a pharmaceutically acceptable salt thereof.

47. (*original*) A compound according to claim 1, wherein said compound is 8-Methyl-2-(4-quinolin-2-yl-[1,4]diazepan-1-ylmethyl)-2,3-dihydro-[1,4]dioxino[2,3-f]quinoline or a pharmaceutically acceptable salt thereof.

48. (*original*) A compound according to claim 1, wherein said compound is 8-Methyl-2-[4-(4-methyl-quinolin-2-yl)-[1,4]diazepan-1-ylmethyl]-2,3-dihydro[1,4]dioxino[2,3-f]quinoline or a pharmaceutically acceptable salt thereof.

49. (*currently amended*) A method of treating a subject suffering from a condition selected from depression, anxiety, panic disorder, post-traumatic stress disorder,

premenstrual dysphoric disorder, attention deficit disorder, obsessive-compulsive disorder, social anxiety disorder, generalized anxiety disorder, obesity, eating disorders, vasomotor flushing, ~~co~~eaine and alcohol addiction, and sexual dysfunction, comprising the step of:

providing to said subject suffering from said condition, a therapeutically effective amount of a compound according to claim 1 or a pharmaceutically acceptable salt thereof.

50. (*original*) A method according to claim 49, wherein the condition is depression.

51. (*original*) A method according to claim 49, wherein the condition is selected from the group consisting of obsessive-compulsive disorder, panic attacks, generalized anxiety disorder, and social anxiety disorder.

52. (*original*) A pharmaceutical composition, comprising:

an effective amount of a compound according to claim 1 or a pharmaceutically acceptable salt thereof; and
a pharmaceutically acceptable carrier or excipient.